

A Memorandum Addressing the Issues in S.L. 2008-137

Prepared by Alcoa Power Generating Inc.
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The N.C. General Assembly, through S.L. 2008-137¹, has directed the Environmental Review Commission to study three issues in light of the pending issuance of a new 50-year license by the Federal Energy Regulatory Commission (FERC) to Alcoa Power Generating Inc. (APGI) for its Yadkin Hydroelectric Project (Yadkin Project or Project). These issues include: (1) the socioeconomic impact resulting from the loss of jobs at Badin Works in Stanly County; (2) the assurance of an adequate clean future water supply from the Yadkin River; and (3) the allocation of water for non-power uses. This memorandum provides background along with details of APGI's position with respect to those specific issues and also includes a discussion of topics that, although not specifically mentioned for study in the authorizing legislation, have been raised during the Project's relicensing and the discussion of the study bill.

I. Background on the Yadkin Hydroelectric Project

The Yadkin Project is owned and operated by APGI, a wholly-owned subsidiary of Alcoa Inc. (Alcoa). The Project is comprised of four hydroelectric stations, dams and reservoirs along a 38-mile stretch of the Yadkin River, all of which sets within and among 38,000 acres of real estate in Piedmont North Carolina owned by APGI. The four reservoirs are: High Rock, Tuckertown, Narrows (Badin Lake) and Falls. The Project produces clean, renewable energy and has an installed capacity of 215 megawatts.

Starting in 1915, APGI's predecessors invested substantial capital to purchase property and related flood rights along the Yadkin River and develop the Yadkin Project. While the electricity generated at the Project was originally used to support the electric power needs of Alcoa's Badin Works smelter, the power is now sold on the open market and is available for use by electrical consumers, including residential customers and industrial users.

The Federal Relicensing Process - The operation of the Yadkin Project is regulated by FERC. FERC's predecessor, the Federal Power Commission, issued a 50-year license for the Project in 1958.² When the license expired at the end of April 2008, APGI received an annual license that renews automatically until a new long-term license is issued. The company expects FERC to issue a new long-term license for the Project in 2009.

The FERC relicensing process formally began in September 2002. APGI worked closely with stakeholders for more than five years to address key issues related to the Yadkin Project and its role within the Yadkin – Pee Dee River watershed. More than 100 people participated in the relicensing process, initially through "Issue Advisory Groups" that were established in February 2003, and later more than 30 organizations participated in the settlement negotiations. A total of

¹ See Appendix #1 – S.L. 2008-137

² See Appendix #2 – 1958 License Order and Hearing Examiner's Decision. As discussed further herein, the FERC license for the Yadkin Project was modified a number of times before its expiration in 2008.

23 technical studies were conducted from 2003 to 2005.³ The studies, recommended by relicensing participants, focused on issues such as water quality, wetlands, fisheries, aquatic habitat, rare species, wildlife and terrestrial habitat, recreation, and historic and prehistoric cultural issues.

The Relicensing Settlement Agreement⁴ - As part of its effort to engage stakeholders and to resolve issues at the state and local level, APGI voluntarily chose to pursue a relicensing settlement agreement that would address local interests and resolve key issues to the greatest extent possible. Settlement negotiations began in early 2005 and continued for two years. A formal Relicensing Settlement Agreement (RSA) was submitted to FERC for approval on May 7, 2007. The agreement — supported by 23 major stakeholder groups — strikes a balance among many competing interests along the Yadkin River.⁵ If approved by FERC, as contemplated in the RSA, the RSA will resolve most of the issues raised during the course of relicensing the Project and many of its provisions will become part of the new license as terms and conditions.

Stanly County participated in the relicensing process until mid-2006. In a June 26, 2006 letter to APGI, Stanly County indicated it was not willing to sign the RSA. Stanly County attempted to justify its refusal to sign the RSA by pointing to APGI's unwillingness to bear the cost of a new water and sewer system for the town of Badin to replace the one Alcoa built for the town more than 80 years ago, APGI's decision not to donate certain land to Stanly County, and APGI's "failure" to provide revenue enhancements to the Town of Badin and Stanly County.⁶ APGI responded to Stanly County with a letter that explained that it could not agree to Stanly County's demands because these issues were not related to the Project relicensing and were better addressed in separate discussions.⁷ Despite support for the RSA from the City of Albemarle and the Town of Badin (both located within Stanly County), the County withdrew from the settlement discussions. Thereafter, Stanly County was not involved in the negotiations process that resulted in the final RSA that was submitted to FERC in May 2007.⁸

Benefits of the RSA - As a result of the measures agreed upon in the RSA and issuance by FERC of a final new license for the Project as contemplated in the RSA, North Carolina and its citizens and environment will benefit from improved water quality, increased recreational opportunities and stronger environmental protections. Here is a summary of key benefits of the RSA:

- **Improved Water Quality:** In conjunction with a planned \$240 million investment to refurbish, upgrade and improve the efficiency of its power generators under the new license, APGI will install state-of-the-art aeration technology to increase dissolved oxygen levels and improve water quality in the Yadkin River.
- **Higher Water Levels & A More Consistent Flow of Water:** To support recreational and environmental interests, while providing adequate downstream flow releases to support downstream municipal and industrial uses in both North and South Carolina,

³ See Appendix #3 – Relicensing Studies

⁴ See Appendices #4, #5 & #6 - Yadkin Project Relicensing Settlement Agreement

⁵ See Appendix #7 – List of RSA Signatories

⁶ See Appendix #8 – June 26, 2006 Letter from Stanly County Board of Commissioners Chairman Tony Dennis

⁷ See Appendix #9 – July 19, 2006 Letter from APGI Licensing and Property Manager Gene Ellis

⁸ As noted below, Stanly County later opposed the issuance of the water quality certificate needed for the renewal of the FERC license.

- APGI has agreed to implement operational changes that will keep more water in High Rock Lake and provide a more consistent flow of water to downstream water users.
- **Improved Drought Management:** APGI will implement a comprehensive drought management plan (known as the “Low Inflow Protocol”) that will protect reservoir water levels while providing adequate downstream flows during drought conditions. The plan requires APGI to reduce power generation and send less water downstream when certain drought-related triggers are reached.
 - **Shoreline Protections:** The shorelines of the Yadkin Project reservoir will be given further protection and portions will be preserved in a natural, undeveloped state, while current property owners will be given more flexibility regarding shoreline development. APGI will revise its Shoreline Management Plan to provide greater flexibility regarding the construction of new piers and other related activities, while ensuring any new development is conducted in an environmentally responsible manner.
 - **Increased Land Conservation and New Recreation Opportunities:** APGI will donate or make available for purchase more than 6,000 acres (roughly 40% of its non-Project land holdings) for recreation, game lands or conservation. Part of that 6,000 acres includes donation by APGI of more than 1,000 acres of its non-Project land for the expansion of Morrow Mountain State Park in Stanly County and 14 acres to the Town of Badin for a new public park along the Badin Lake waterfront. APGI will also donate 63 acres of land to Rowan County for the continued protection of and public access to the Eagle Point Nature Preserve.
 - **Expanded Public Recreation Facilities:** APGI has agreed to invest more than \$1 million in the development and maintenance of new or expanded public recreation facilities within the Yadkin Project, including a new public swim area in Rowan County, new tailwater fishing access areas, two new reservoir fishing piers and 10 new camp sites.
 - **Increased Water Withdrawals by Local Municipalities:** The City of Albemarle will be allowed to increase water withdrawals up to 30 million gallons per day, pending FERC approval. That is more than four times the amount of its current water consumption.

APGI estimates that its cost in implementing the provisions of the RSA will be about \$2 million per year over the course of the new license period. It should be emphasized, however, that the RSA and its corresponding benefits to the State of North Carolina and its citizens and environment will not go in to effect until a new license, which satisfies and incorporates the provisions of the RSA, is granted by FERC to APGI.

II. The Yadkin Study Bill (S.L. 2008-137)

Issue #1: The Socioeconomic Impact Due to Job Losses at Badin Works

Alcoa began producing aluminum at the Badin Works smelter in 1917. At the time, it was one of the nation’s first smelters. But 85 years later, it had become one of the nation’s smallest and oldest smelting facilities. Like many North Carolina manufacturing companies, the Badin Works smelter was affected by changing global economic factors. It could no longer remain financially competitive and aluminum smelting was curtailed in August 2002. The plant continued to manufacture high-purity aluminum until October 2007.

Having served as the largest employer in Stanly County for many years, there is no question that the company's decision to curtail operations at the Badin Works smelter affected the community. However, it is important to examine three critical questions: (1) Did Alcoa take meaningful steps to minimize the impact of the loss of jobs on the community?; (2) Has Alcoa continued to support the economic growth of Stanly County?; and (3) Has Stanly County recovered from the loss of jobs at Badin Works? In that connection, is the employment history at Badin Works relevant to the relicensing of the Yadkin Project?

Did Alcoa take meaningful steps to minimize the impact of the loss of jobs? Yes. When aluminum smelting was curtailed in 2002, the job cuts immediately affected 236 of the plant's 373 employees. The Badin Works plant maintained the reduced workforce in 2003 and that figure gradually declined over the years until the remaining jobs were lost in October 2007. Here's a breakdown of what happened to those employees: 140 employees (37 percent) retired with pension and benefits after receiving substantial pay and benefits for up to two years; 96 employees (26 percent) transferred to new positions within Alcoa; and 137 employees (37 percent) were laid off and received substantial pay and benefits for up to two years.

Alcoa spent approximately \$200,000 to assist employees who sought other employment. The company provided services to assist in the transition to a new job, including resume development, interviewing skills and job placement services. In addition, a NAFTA-related government program provided free tuition to laid-off employees. Many former employees took advantage of this program, attended Stanly Community College and were eligible for outplacement services offered by the College.

Since the curtailment in 2002, Alcoa and the Alcoa Foundation have been strong financial supporters of Stanly Community College. The company joined forces with the College to establish the Displaced Workers Training Program to ensure displaced workers could receive the valuable skills training they needed to land a new job. The program has trained hundreds of employees who lost their jobs when manufacturing and textile companies closed their plants.

Following the curtailment, Alcoa sought to redevelop the Badin Works site to attract new industries and new jobs to the area. Alcoa hired a consultant to conduct a "Highest and Best Use" Study for the plant site and began marketing the site to several companies in partnership with local, regional and statewide economic development agencies. Alcoa has had discussions with companies interested in the site and remains committed to redeveloping this property in a manner that will support the local economy and offer opportunity to grow the county's tax base.

Has Alcoa continued to support the economic growth of Stanly County? Yes. Despite the job losses, Alcoa and APGI remain important contributors to the Stanly County community with a direct economic impact of almost \$9 million a year based upon consideration of payroll, property taxes, sales and use taxes, and other factors. The companies remain the largest single taxpayer in Stanly County, with annual property taxes of more than \$500,000. APGI employs 31 people and an additional 80 contractors.

Alcoa actively supports economic development efforts in Stanly County. In December 2007, the Alcoa Foundation provided a \$250,000 economic development grant to benefit the Town of Badin. The two-year grant, which will be administered by the N.C. Rural Economic Development Center, is designed to revitalize the downtown business district. This is one example of how Alcoa, APGI, and the Alcoa Foundation have contributed \$3 million to support non-profit organizations in North Carolina during the past 20 years.

Indirectly, APGI's reservoirs have contributed significantly to the economic growth of the region. When the Yadkin Project was developed, it led to the impoundment of four reservoirs along the Yadkin River, including Badin Lake and High Rock Lake. The economic impact the reservoirs have brought to Piedmont North Carolina — by promoting responsible development, increasing property values, supporting local businesses and attracting tourists to the region — is substantial. The reservoirs are one of the region's crown jewels and have served as an economic force in Stanly County and the surrounding counties for decades.

Has Stanly County recovered from the loss of jobs at Badin Works? Yes. Statistics show that the Stanly County economy has performed well since the curtailment of the Badin Works plant. Specifically, Stanly County grew its tax base by \$705 million (20.5%) from 2001 to 2008, representing an increase of more than \$4.5 million in annual tax revenues; Stanly County added 2,496 new jobs between 2001 and June 2008, while unemployment rates dropped by 1.1%; and per capita income for Stanly County increased 13.5 percent between 2000 and 2005, from \$23,135 to \$26,251, reflecting its status in the top half of the State's counties.

Is the employment history at Badin Works relevant to the Yadkin Project relicensing? No. First, regarding the existing license, Stanly County has attempted to create the incorrect impression that the 1958 FERC licensing order somehow required that APGI maintain a certain number of jobs at the Badin Smelter, or that the changes at the plant and its ultimate curtailment must somehow prevent the renewal of that license. Neither contention is correct. Neither the 1958 decision of the Federal Power Commission (FERC's predecessor) (19 FPC 704) nor the underlying Hearing Examiner's (19 FPC 707) decision required as a condition of the license that a certain number of jobs be maintained at the Badin Smelter, or even that the plant be kept open. Only in a section of his opinion entitled "Length of the License Period"⁹ did the Hearing Examiner refer to Alcoa testimony regarding the relative size and competitiveness of the Badin smelter as of 1958, as well as the necessary investment and the consequent jobs created, to justify the issuance of a license of 50 years' duration. There is no other discussion of jobs in any other context in the Hearing Examiner's decision. The creation of jobs is not even mentioned in the Commission's decision adopting the Hearing Examiner's decision.

Second, in the Project relicensing proceeding, FERC staff expressly rejected this argument in Scoping Document 2 on May 4, 2007, wherein FERC staff stated,

"Relicensing Project No. 2197 is unrelated to the possible future closing of the Badin Plant or any other Alcoa Inc. business activity not associated with the operation of the Yadkin Project by Alcoa [Power] Generating."¹⁰

⁹ See Appendix #2 pps. 11-15

¹⁰ P-2197-073, *Scoping Document 2*, issued May 4, 2007, page 8.

Further, in the Final Environmental Impact Statement that was issued for the Yadkin Project, FERC staff stated:

"We do not view the decisions made by businesses that have used project power, however negatively they have affected the local economy, as a project effect. Thus, it is not incumbent upon the project to remedy that effect."¹¹

As a consequence, as noted by FERC staff, neither the status of the Badin plant nor the jobs there were in any way intended to be assured or controlled by the existing license and have been rejected as a part of the current relicensing process.

Issue #2: Assurance of an Adequate Clean Future Water Supply

APGI recognizes that North Carolina must have access to an adequate clean water supply to help meet its future water needs. The issuance of a new long-term license for APGI to generate hydropower along the Yadkin River will not impair the State's ability to address its future water needs, and APGI will continue to provide the benefit of its reservoirs' water storage that is already being utilized for municipal water use. North Carolina currently has — and will maintain — ample authority to regulate water use within the Yadkin River, including the right to withdraw more water from the Yadkin River and to transfer water between basins, subject to federal oversight and the rights of downstream riparian owners. By contrast, APGI's rights are limited and subject to state and federal regulation that govern the use of the water in the reservoirs of the Yadkin Project. Furthermore, the issuance of a new, long term license for the Yadkin Project will obligate APGI to allow for reasonable withdrawals of water stored in the Project reservoirs for water supply purposes, in accordance with plans approved under North Carolina law.

Adequate Water Supply

APGI owns real property along the Yadkin and with it, the riparian rights to reasonably use the water to which its property adjoins. To understand the role of the Project in providing water supply for North Carolina, one must understand the intricate interplay between federal and state law and their effect on APGI's riparian rights.

Understanding FERC Power to Regulate: FERC has specific authority to regulate any proposed withdrawals of water from the Yadkin Project.¹² The power of the federal government

¹¹ Final Environmental Impact Statement For Hydropower Licenses Yadkin Hydroelectric Project - FERC Project 2197-073, Yadkin-Pee Dee River Hydroelectric Project - FERC Project 2206-030, issued April 2008, pages A-30 through A-31.

¹² Under federal law, jurisdiction over the navigable streams and waterways of the United States is essentially shared between the U.S. Army Corps of Engineers ("USACOE") and FERC. As between them, USACOE's jurisdiction is older. Some of that authority dates back to the earliest days of the nation, but in the 1899 Rivers and Harbors Act, 33 U.S.C. § 401 *et seq.*, USACOE was given express authority to regulate the placement of dams or obstructions in waters of the United States. USACOE's jurisdiction was modified, however, with the enactment of the Federal Water Power Act in 1920, the statute we now refer to as Part I of the Federal Power Act ("FPA"), to provide for the licensing and regulation of hydroelectric dams and accompanying impoundments. 16 U.S.C. § 791 *et seq.* These historic antecedents and blending of federal jurisdiction is most easily seen in Section 4(e) of the FPA where FERC's

to regulate hydroelectric dams and reservoirs derives from the authority of the United States, "...To regulate Commerce ...among the several States, and with the Indian Tribes." *U.S. Constitution, Article I, Section 8*. The Federal Power Act (FPA) asserted the authority of the United States over navigable streams because of its role in interstate commerce, and through the FPA the United States began to regulate construction and operation of dams because of its effect on navigation. *U.S. v. State of West Virginia*, 295 U.S. 463 (1935). However, the United States, through the FPA, has never asserted ownership over the water in interstate rivers, and in fact all state law rights of ownership and use of water - except as may affect navigation - are explicitly preserved by the FPA. 16 U.S.C.A. Section 821.¹³

What FERC is regulating through the FPA license is APGI's right as a landowner under North Carolina law to reasonably use water it impounds in the Yadkin Project.

Having created the reservoirs of the Yadkin Project, APGI's authority over the water in those reservoirs is limited. It can use that water to generate electricity, according to the terms and conditions of its FPA license. The license gives FERC the authority to direct APGI to grant access for the installation of water intakes, as well to regulate the charges that APGI can levy for such access and/or the water withdrawn, subject to North Carolina's broader determinations regarding use of the state's native water resources.¹⁴ Specifically, the FPA preserves water rights under state law. Moreover, section 10(a)(1) of the FPA requires that the operation of the impoundment meet the "best adapted" standard regarding balancing beneficial public uses of the water, including environmental protection, recreation, irrigation, flood control and water supply.

Understanding State Water Rights: The State of North Carolina has the authority to control use of the water in the Yadkin River, subject to FERC regulation of the impoundments of the Yadkin Project and the U.S. Army Corps of Engineers' requirements regarding navigation.

The right to consume the water in the Project's reservoirs (i.e. withdraw and not return it, as compared to merely direct it through a turbine at the dam) is entirely a matter of state law.¹⁵ Because the Yadkin/Pee Dee River is an interstate river that originates in North Carolina, has tributary flows from southern Virginia, and then flows into South Carolina, all three states have rights with respect to consumption of water in the Yadkin River basin. In other words, no one state can exclude the others from the water by diverting or consuming it. Where a conflict arises between or among states regarding their rights to interstate waters, the United States Supreme

authority to issue licenses is defined, subject to the approval of the USACOE and the Secretary of the Army regarding the effects of any licensed dams or other structures on navigation. 16 U.S.C. § 797(e).

¹³ § 821. State laws and water rights unaffected: Nothing herein contained shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.

¹⁴ See *Georgia Power Company*, 98 F.E.R.C. ¶ 61,239, P-2177-041, (2002).

¹⁵ There seems little doubt that there is an opportunity for conflict between FERC's Section 10(a)(1) judgment on balancing beneficial uses of the water and the state's judgment on water consumption/diversion. In practice, however, it appears that by giving wide deference to state law, FERC has managed to avoid such conflicts. See *Georgia Power Company*, *supra*; *Alabama Power Co.*, 74 F.E.R.C. ¶ 61,157, P-349-030, (1996); See also *Alabama Power Co.*, 75 F.E.R.C. ¶ 61,025, at p. 61,077 (*order denying rehearing*. ("[T]he Commission's role is limited to granting or denying permission for a third party to use lands and waters of a licensed project. The rights to the water itself must be obtained pursuant to state law."))

Court¹⁶ will apply the federal common law doctrine of “equitable apportionment.” Pursuant to this doctrine, the water rights laws of no affected state will be dispositive, although the Court will take them into account in the exercise of its equitable powers to determine the conflicting states’ rights to that water.¹⁷

The Supreme Court has recognized that watershed (or basin) transfers are generally the prerogative of the state. The Court has noted that, “[d]iversions from one watershed to another are commonly made in both states, and the practice is recognized by the decisions of their courts.”¹⁸

Thus, the State of North Carolina has the sovereign authority to control consumptive uses of the water as well as whether the water should be diverted from the Yadkin River watershed to some other watershed. However, the State can only control consumption and diversion of a “reasonable” amount of the water in the Yadkin watershed in North Carolina since South Carolina, a co-equal sovereign to North Carolina¹⁹ with respect to the waters of the Yadkin/Pee Dee River, also has rights to receive water in the river once it leaves the border of North Carolina. And the rights of both states regarding diverted water are subject to the navigability servitude of both FERC and USACOE.

Understanding APCI’s Riparian Rights: The FPA license for the Yadkin Project gives APCI the right, through the operation of federal law, to maintain and operate impoundments behind its dams, and to control the flow of water through its turbines or spillways, all of which are activities affecting navigation. However, its right to actually use the water in the Yadkin River for these purposes derives not from federal law, but from its ownership of riparian lands that adjoin the original course of the river, lands owned in fee simple upon which the dams and the reservoirs reside. As noted above, those are state law rights, guaranteed to all such landowners by the State of North Carolina, and those rights do not include the right to decide how the water is consumed or diverted to another watershed.

The common law doctrine of “riparian rights” that exists in North Carolina demonstrates that private riparian owners have rights in the water to the extent that the water is subject to the uses and rights of those riparian owners. A person who owns land adjacent to a watercourse -- whether navigable or non-navigable -- is a riparian owner.²⁰ Riparian rights in North Carolina are those rights annexed to the parcel of property in actual contact with a natural watercourse.²¹

¹⁶ These water disputes between or among states must be filed with the U.S. Supreme Court under its original jurisdiction.

¹⁷ See, e.g. *Arizona v. California*, 373 U.S. 546, 597 (1963) (“The doctrine of equitable apportionment is a method of resolving water disputes between States. It was created by this Court in the exercise of its original jurisdiction over controversies in which States are parties.”) *Colorado v. New Mexico*, 459 U.S. 176, 183 (1982) (“Equitable apportionment is the doctrine of federal common law that governs disputes between States concerning their rights to use the water of an interstate stream. It is a flexible doctrine which calls for the ‘exercise of an informed judgment on a consideration of many factors’ to secure a ‘just and equitable allocation’.”)

¹⁸ *Wyoming v. Colorado*, 259 U.S. 419, 466 (1921)(citations omitted), reh. Den. And decree modified, 260 U.S. 1 (1922)

¹⁹ See *Pollard's Lessee v. Hagan*, 44 U.S. 212 (1844). By the time the Yadkin River reaches North Carolina, Virginia’s rights to its waters are no longer an issue.

²⁰ Aycock, *Introduction to Water Use Law in North Carolina*, 46 N.C.L.Rev. 1, 17 (1967) (“Aycock”).

²¹ *Id.*, p.4 (internal citations omitted).

Riparian rights are property rights, are valuable, and cannot be arbitrarily or capriciously destroyed or impaired.²²

At common law, traditionally, the owner of the riparian parcel had a right to have the flow in the watercourse undiminished in quality and quantity, except for diversions by upstream riparian owners for “natural” uses, such as drinking, bathing, and irrigation. Industrial uses were permitted only to the extent that water could be returned to the stream without substantial diminution of quantity or impairment in quality.²³ The N.C. Supreme Court has since adopted the rule of reasonable use, also referred to as the American rule. Whether a use is reasonable is a question of fact, determined by, *inter alia*, the occasion and manner of the application of the use, the nature and size of the stream, the importance and necessity of the use and the extent of injury that it causes.²⁴

This brief discussion of riparian rights does not fully define the scope of riparian rights held by riparian owners, but is included simply to demonstrate that private riparian owners hold rights that are well established at common law.

How the FERC License Specifically Affects Water Withdrawals: The Project license is the principal mechanism for FERC’s regulation of the disposition of water in the Project. As noted earlier, what FERC is actually regulating through the FPA license is APGI’s right as a landowner under North Carolina law to reasonably use water it impounds. Essentially, FERC is permitting the licensee to operate hydroelectric impoundment structures (i.e. dams) on the waters of the United States in return for the licensee’s commitment to exercise its land ownership rights (including its water riparian right) in the manner provided in the license. The following provisions of the Project license are of particular note:

(1) Reservation of federal rights to Project waters. Under Article 13²⁵ of the existing 1958 license²⁶, the United States reserves the right to use the water of the impoundment in the amounts necessary for navigation, subject to such reasonable rules and regulations that the Secretary of the Army might prescribe in the interest of navigation as well as FERC’s own rules for the protection of life, health and property.

(2) The Project license has specific requirements and limitations on licensee’s ability to convey Project property and associated property rights. Article 17 directs APGI to retain possession of all project property, including “...all franchises, easements, water rights, and rights

²² *Shepard’s Point Land Co. v. Atlantic Hotel*, 132 N.C. 517, 538, 44 S.E. 39, 45-46 (1903).

²³ Martz, *Water for Mushrooming Populations*, 62 W. Va. L. Rev. 1, 8 (1959), quoted in Aycock 5-6.

²⁴ *Dunlap v. Carolina Power & Light Co.*, 212 N.C. 814, 820, 195 S.E. 43, 47 (1938).

²⁵ Article 13 is a standard license article that appeared in all licenses issued around that same time. Today’s versions of standard license articles are found in the L-Forms, referenced in 18 CFR § 2.9. When the new Yadkin Project license is issued by FERC, it probably will incorporate by reference Form L-5 (54 F.P.C. 1832), Article 12 of which appears to be identical to Article 13 of the 1958 license. *Id.* at 1836.

²⁶ The terms and conditions of the 1958 license, as amended over the years, are also the terms of the annual license that became effective on May 1, 2008 with the expiration of the 50-year term of the 1958 license.

of occupancy and use." Also, Article 35, adopted in 1980 as FERC's standard land use article²⁷, states that,

"...(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: ... (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir."

However, before APGI is permitted to make a conveyances pursuant to Article 35(c), it is required by Article 35(e) to consult with federal and state resource agencies and take steps to ensure protection of "...scenic, recreational, and other environmental values of the project."

Given changes in FERC licensing since 1980, the new license for the Yadkin Project is likely to contain different and more direct provisions regarding withdrawals from Project waters. The standard license form now issued by FERC that will be applicable to the Yadkin Project, L-5,²⁸ includes an article regarding water withdrawal, denominated Article 13, which provides:

"*Article 13.* On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing."²⁹

Therefore, although the present FERC license does not directly address water withdrawal rights, the new license for the Yadkin Project that FERC will issue will specifically address withdrawal of water from Project reservoirs for water supply and other purposes.

²⁷ Although Article 35 was part of the 1958 license and is now part of the annual license currently in effect for the Yadkin Project, the standard land use article that became Article 35 is now routinely included in new licenses issued by FERC, and is expected to be part of the new, long term license that FERC will issue for the Yadkin Project.

²⁸ Form L-5 applies to major constructed projects that affect navigable waters as well as lands of the United States, and would be applicable to the Yadkin Project by virtue of its proximity to the Uwharrie National Forest. *See 18 CFR § 2.9.*

²⁹ 54 F.P.C. 1832, 1836-7. The balance of Article 13 reads,

"Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters."

Summary: APCI's disposition and use of the water in the reservoirs of the Yadkin Project are governed by North Carolina law. In addition, the present Yadkin Project license further regulates APCI's management of the reservoirs, including releases from the dams, and management of the lands that are part of the Project. FERC's regulation of management of Project lands includes regulation of placement of facilities in the reservoirs for water withdrawals. APCI, as the licensee, is not permitted to grant an easement for the facilities that withdraw more than one million gallons per day unless it first obtains FERC approval.

However, the new license will have provisions that address water withdrawals specifically, and will require APCI to approve requests that are consistent with state law. Specifically, the new long term license will provide for: (1) an obligation on the part of APCI to permit persons, associations, corporations, municipalities, state and federal agencies to seek reasonable withdrawals of water stored in the Project reservoirs for water supply purposes, in accordance with plans approved under North Carolina law for the use of such waters; and (2) FERC regulation of the compensation that APCI would receive due to withdrawal of impounded water.

Clean Water Supply

Granting a long-term license to APCI will not affect North Carolina's ability to maintain a clean water supply. APCI has acted as a good steward of the water quality of the Yadkin and water quality is an important feature of the Project's relicensing. The NC Division of Water Quality (DWQ) has the authority to review and rule on the 401 Water Quality Certificate application, which is a necessary step in the FERC relicensing process. Its review focuses on whether the water discharged from the Project's powerhouses meets applicable water quality standards. APCI has worked closely with DWQ during this process and APCI believes that DWQ will issue the 401 certificate after a thorough review of the water quality issues involved.

NC 401 Water Quality Certificate - As part of the federal relicensing process, Section 401 of the federal Clean Water Act requires APCI to obtain a water quality certificate from the State of North Carolina. The Section 401 certificate focuses on whether the water being discharged from the Yadkin Project meets North Carolina's water quality standards. As previously pointed out, APCI plans to invest \$240 million to refurbish and upgrade the Project's power generators, increase dissolved oxygen levels and improve water quality as part of the Yadkin Project RSA.

APCI submitted an application for a Section 401 certificate to the DWQ on May 9, 2007. After six months of evaluation, DWQ issued a Section 401 Water Quality Certification to APCI on November 17, 2007.

In January 2008, Stanly County appealed DWQ's issuance of the 401 Water Quality Certificate. In statements filed on February 22, 2008, attorneys for the State of North Carolina defended DWQ's work, stating that APCI "has provided adequate assurance that the work of the Yadkin Project will not result in a violation of applicable water quality standards and discharge guidelines."

In April 2008, State officials discovered that a required legal notice regarding its application for a water quality certificate was not published, as required by law.³⁰ As a result, DWQ revoked APCI's water quality certificate, published the required public notice and agreed to accept public comments for a 15-day period ending on May 2, 2008. Because federal laws require the State to act on Section 401 applications within one year — before May 10, 2008, in this case — DWQ had little time to adequately review the public comments it received. At DWQ's request, APCI withdrew and immediately resubmitted its application for a Section 401 water quality certificate to allow more time for DWQ to consider the application. DWQ now has until May 8, 2009 to take action on APCI's resubmitted 401 application.

During this current 401 application review period, DWQ asked APCI to prepare plans for additional studies involving water and sediment sampling. Study plans have been developed and water quality sampling was conducted in August 2008.

As part of these studies, DWQ asked that APCI sample water discharged from the Narrows Powerhouse for Priority Pollutants (heavy metals and organic pollutants including volatile organic compounds, acid extractable compounds, base-neutral compounds, and PCBs). The final report of those discharge samples was filed with DWQ on September 29, 2008. The report found that none of the pollutants were detected in concentrations in excess of the NC water quality standards and, in most cases, the concentrations were below the method detection limit (i.e., the levels were so low that they could not be detected). These results demonstrate that the operation of the Narrows development does not result in the discharge of any of these pollutants in excess of NC water quality standards. In addition, APCI revised and submitted the sediment sampling plan the agency requested. APCI now considers the application complete.

Previous Water Quality Studies: The State of North Carolina monitors water quality in the Yadkin-Pee Dee River, and the Yadkin Project reservoirs as part of its State-wide ambient water quality monitoring program. Through these State monitoring efforts, it is well documented that the Yadkin Project reservoirs suffer from moderate eutrophication, which is the enrichment of the waters by inputs of phosphorous and nitrogen from both point and non-point sources, as well as turbidity and sediment concentrations, which come from sources upstream of the reservoirs.

As part of the relicensing process, APCI conducted two studies specific to water quality. The Water Quality Monitoring Study examined reservoir and tailwater water quality based on four years of monthly water quality monitoring data collected at more than 20 monitoring stations throughout the Yadkin Project. The study also examined how water quality is affected by reservoir water levels and flow releases. The Sediment Fate and Transport Study reviewed existing data and literature to understand the sources of sediment in the Yadkin Project, and to estimate the load of sediment retained within the reservoirs. The results of APCI's water quality studies confirmed the State's earlier conclusions regarding water quality in the Project reservoirs.

In addition to the studies cited above, the N.C. Department of Public Health is currently conducting a fish tissue study at Badin Lake. The intended purpose of the study is to evaluate

³⁰ APCI had provided the information necessary for the publication of the notice. The lack of publication was apparently an inadvertent oversight, not attributable to APCI.

exposure risk and human health concerns associated with the consumption of fish from Badin Lake. The study is not designed to trace any contaminants found in fish tissue back to a specific location or source. Analytical results are expected to be completed in November 2008.

Further, as part of its remediation effort, APCI and the N.C. Department of Environment and Natural Resources (DENR) recently entered into a voluntary agreement for remediation of a small area in an embayment at the base of Narrows powerhouse. This remediation stems from capacitors that were discovered in late 2001 discarded behind the Powerhouse. The capacitors were removed in 2002. This effort involves the removal of a small amount of contaminated soil and sediments remaining behind the Powerhouse in the area where the capacitors were discovered. DENR has submitted the scope of work for public comment and, with final agency approval, APCI will begin remediation as early as possible. All work will be completed in accordance with the approved remediation plan. (Please see discussion of other environmental issues below at pages 32 to 36).

Summary: Since constructing the Yadkin Project, APCI has worked to preserve the water quality. The construction of the Yadkin Project reservoirs has made the Yadkin River an available water source for North Carolina. It is the role of DWQ to preserve, protect and enhance North Carolina's water and groundwater resources through quality monitoring programs and through its permitting authority. DWQ had previously determined that APCI met all the requirements for a 401 water quality certification. DWQ's review of the current application should continue without interference. If allowed to do so, APCI believes that DWQ will issue the 401 certificate because, as numerous studies have shown, there is nothing in the environmental record that will prevent DWQ from doing so.

Issue #3: Allocation of Water for Non-Power Uses

Water allocation and the provision of water for non-power uses is already being studied by the ERC, and, as noted earlier, the RSA has - and the new, long term license will have - numerous protections for the allocation of water for non-power uses that will benefit the people of North Carolina. APCI has a good track record of working with municipalities, including during times of drought, to manage the allocation of water in the Project's reservoirs for consumptive purposes. In addition, as previously stated, the State has ultimate authority over the control of water in the Yadkin River, subject to certain FERC regulations and to APCI's riparian water rights.

- **ERC Water Allocation Study:** The ERC's ongoing water allocation study will look comprehensively at the issues of water accumulation, storage, allocation and use in a broader context. Some key water allocation issues relative to the Yadkin Project have already been addressed in the federal relicensing process, including meeting downstream flow requirements and maintaining adequate water levels for recreation and environmental purposes. These issues are addressed in the RSA at Sections 3.1.1 through 3.1.3.2.³¹

- **Drought Management:** Management of the Yadkin River during periods of drought has become a significant focus for APCI as well as the stakeholders of the Yadkin. Based on the

³¹ See Appendix #5

experience gained during the drought of 2002, APGI developed a drought management plan through consultation with Progress Energy, state agencies, interested homeowners and businesses that are affected by extreme drought conditions. This consensus plan, described as the Low Inflow Protocol, which is part of the RSA³², will be implemented in a new FERC license term and outlines specific actions that APGI must take when certain specific drought events occur. During the recent prolonged drought that affected Piedmont North Carolina, APGI has voluntarily adopted many elements of the proposed Low Inflow Protocol, even though the new license has been delayed. These drought provisions do not foreclose other actions by the State of North Carolina regarding drought, but they do provide components which could be part of a more comprehensive State drought process.³³

• **Water Withdrawals:** The Yadkin Project reservoirs are the source of water for many local communities in the Piedmont, including public drinking water systems operated by Albemarle, Denton and Salisbury. Albemarle withdraws about 7 million gallons of water a day (on average) from the Yadkin Project, making it one of the largest water users. As noted earlier, the State of North Carolina has the authority to regulate water use within the Yadkin River Basin, including the right to issue water withdrawal permits to meet demand. APGI does not oppose use of its reservoirs for drinking water, although FERC must approve new, large volume water withdrawals from the Yadkin Project.

During the past 50 years, four new major water intakes and withdrawals were approved at the Yadkin Project. APGI successfully worked with three municipalities and one irrigation user to provide new withdrawal intakes from the Yadkin Project. In addition, APGI worked with one municipality that needed to increase its water withdrawal amounts over time. Some of these withdrawals would presently be considered Interbasin Transfers.

III. Other Issues Covered by S.L. 2008-137 - Issuance of the Water Quality Certificate

Section 4 of S.L. 2008-137 deals with when DENR's DWQ can issue a Section 401 water quality certificate ("401 certificate") to APGI, which is a necessary step in the relicensing process. Section 4 does not suspend action by DENR, and, in fact, is very specific in noting that the study should proceed "without delaying" the agency's decision on the 401 certificate. This section even notes that it is not "the intent of the General Assembly to delay the processing" of the 401 certificate. The language says that the ERC report shall be considered by DENR when it makes a decision whether to issue the 401 certificate, but clarifies that this is only "to the extent allowed by State and federal statutes and rules." Thus, APGI anticipates timely action on the pending 401 certification application.

According to DENR's regulations, once the agency has received all of the necessary information for a 401 certificate application, the agency has 60 days to make a decision whether to issue the certificate. Section 4 states that the ERC report is part of that information deemed necessary to "trigger" the 60-day time limit. In no way, however, does this language keep DENR from acting on the 401 certificate once it has all of the information it needs. To the contrary, Section 4 specifically notes that, should the ERC study be delayed for any reason,

³² See Section 3.1.4 and Appendix A of the RSA at Appendix

³³ In fact, the 2008 General Assembly adopted comprehensive drought management legislation. S.L. 2008-143.

DENR should not delay making its decision, in recognition of the time limits that apply to the 401 certificate decision, which requires final action by May 8, 2009. Because Section 2 of S.L. 2008-137 requires the ERC report to be finalized on February 1, 2009, DENR is expected to take action on the 401 certificate within 60 days, i.e., by April 1, 2009.

IV. Topics Outside the Scope of the ERC Study

A. Federal Takeover or "Recapture"

Stanly County uses the word "recapture" when discussing its proposal that the State of North Carolina take over APGI's Yadkin Project and enter into the public power business. "Recapture" is Stanly County's euphemism for the words, "taking" or "take over", the latter phrase being that used in the FPA to describe the federal government's right to buy out a licensee's investment in a hydro project when a license expires. That option is set forth in 16 USC § 807, which is Section 14 of the FPA. Note that this right to take over a license is a power that only the federal government has, and only the federal government may choose to exercise.

At the expiration of a license FERC has two options: (1) it may relicense a project, or (2) FERC may recommend that the Project be taken over, and thereafter be maintained and operated by the federal government. Federal takeover of a project has *never* occurred in the 88 years since the FPA was enacted.

FERC may consider the advisability of a government takeover either on its own motion or on the motion of a federal department or agency, but by no other party, not even a state or one of its municipal entities. If FERC determines that the United States should exercise its right to take over a project upon the expiration of a license, it submits its recommendation to Congress and Congress must take action to take over the project on behalf of FERC or an agency or department by appropriating the money for it. If FERC or a federal agency or department does not recommend takeover, then at the expiration of the existing license, FERC is required to issue a new license.

With respect to the Yadkin Project, neither FERC nor any federal agency or department has recommended that the Project be taken over. In fact, just the opposite occurred. In its Final Environmental Impact Statement released in April 2008, FERC staff stated:

"We do not consider federal takeover to be a reasonable alternative for the Projects.³⁴ Federal takeover of the Projects would require Congressional approval. While that fact alone would not preclude further consideration of this alternative, there is currently no evidence showing that a federal takeover should be recommended to Congress. No federal agency has suggested that federal takeover would be appropriate, and no federal agency has expressed an interest in operating the Projects."

³⁴ The FPA license for P-2206, the Yadkin – Pee Dee Project, immediately downstream of the Yadkin Project, also expired at the end of April 2008. That project is owned by Progress Energy of the Carolinas LLC. FERC has been conducting its relicensing of both projects simultaneously, and its Final Environmental Impact Statement covered both projects.

Moreover, the two-year notice provision found in subsection (a) of § 807 which gives the federal government the opportunity to take over a project is no longer available. A recommendation to take over the Project would have had to have been provided at least two years prior to the expiration of the current license.³⁵ The 50-year license APGI had been operating under expired on May 1, 2008, which means that during the two-year notice period that began in May 2006 either FERC or a federal agency or department would have had to begin the take over process. No take over action was commenced.

Stanly County's argument that the federal takeover price is net investment (un-depreciated book value) is simply wrong. In Section 807(a) the FPA specifically provides for severance damages in addition to "net investment...not to exceed fair value". FERC is required to hold a hearing to determine the take over price, so any argument that the State would have to pay a price "considerably lower" than APGI's claimed value for the Yadkin Project is, at best, sheer speculation. In addition, because the new license will require significant upgrade investments by whoever is the licensee (more than \$240 million) the actual cost to any new owner would be considerably greater than the purchase price paid for the Project.

The underlying assumption by Stanly County that the State of North Carolina has any take over rights under the FPA is at odds with the words of the statute, FERC regulations and past actions, and completely without foundation. Only the federal government has take over rights. No state or local government has any take over rights. All the FPA preserves for the State is its condemnation rights, under which it would have to pay fair market value for the Project. The timing for a federal take over action has passed and FERC staff is on record saying that take over of the Yadkin Project is not an option. Accordingly, Project take over is not something that the Environmental Review Commission should be asked to consider.

B. Environmental Waste Sites

Some of the arguments articulated by Stanly County advocates against relicensing the Yadkin Project have nothing to do with the Project at all. Rather, these are arguments directed at Alcoa, APGI's parent company, and involve claims concerning environmental conditions at the Badin Works smelter site, including claims of sites where no such conditions exist, as discussed below. These sites are being properly and timely addressed by Alcoa, under the supervision of appropriate state and federal environmental agencies.

The Badin Works smelter began operations in 1917, before anyone fully understood the potential impact of waste material and long before there were any environmental guidelines or state or federal regulations in place. As a result, like virtually all older industrial sites worldwide, there exists some amount of contamination at the old Badin Works smelter that requires environmental remediation and clean up. Alcoa has been working with state and federal officials for many years to manage waste sites associated with the Badin Works smelter in an appropriate manner.

³⁵ 16 U.S.C. § 807(a)

Alcoa began working with state and federal officials more than 20 years ago to identify and investigate waste sites on its property in Stanly County and to take appropriate action to remediate sites that might pose a health or environmental danger. This work is being done under the close supervision of DENR in accordance with the Resource Conservation and Recovery Act (RCRA), a federal program implemented by the State of North Carolina to regulate the management of waste.

Through the RCRA process, Alcoa identified and investigated 47 potential waste sites associated with the Badin Works smelter in Stanly County, a total of 6 of which were later found to require remediation. Alcoa has spent more than \$8 million to provide appropriate environmental characterization and protection at all 47 of these sites. As part of the RCRA process, Alcoa also recently developed a work plan for the required Corrective Measures Study for the 6 sites where further measures are called for. This plan, submitted to the DENR Division of Waste Management (DWM) in April 2008, determines what additional remediation measures or ongoing monitoring is needed to protect the public and the environment. The study plan is currently being reviewed by DWM officials. Once the plan has been finalized and approved by the State, Alcoa will begin implementing the required actions. Subject to the implementation of this plan upon its approval, the State of North Carolina has determined that no further action is necessary for these sites at this time.

Beginning in 2006, Stanly County officials started raising concerns about additional waste sites that it contended might have been overlooked or ignored by Alcoa. In each instance, Alcoa has worked closely with State or County officials to investigate these claims and search for any evidence of waste as discussed below.

On April 19, 2007, County Manager Jerry Myers submitted a letter to DENR that listed 15 possible waste sites. Dexter Matthews, Director of DWM, reviewed the sites and responded to Mr. Myers on May 18, 2007. Mr. Matthews noted that 10 of the sites were currently “being addressed or have already been addressed by the Division’s Hazardous Waste Section as part of the RCRA (Resource Conservation and Recovery Act) corrective action process.” Another 2 sites were old landfills that are included on the State’s inventory of old landfills identified for future action.

As for the three additional sites, the first is the former Yadkin Brick plant, which is not owned by Alcoa but is owned by two property owners. In September, 2007, DENR investigated the site of one property owner and no evidence of waste was noted. The other property owner denied DENR access. The State has indicated that Alcoa does not have any responsibility for the remediation of this site. The second site is a lime disposal area that Alcoa had reported to the DWM in February 2007. Alcoa investigated the site, collected soil and groundwater samples and hired an outside environmental firm to conduct an independent risk assessment. Results show that chemicals found there are contained, have not impacted soil, groundwater or surface water and are unlikely to pose unacceptable risk to human health or the environment. Those results were shared with the State and Stanly County officials.³⁶ The third site is near Mountain Creek

³⁶ Alcoa would note that Stanly County also sampled groundwater from this area. Stanly County has not shared its sampling results with Alcoa.

Dam (Mercedes Road) where steel drums containing hazardous waste were alleged to be buried. This location has never been owned by Alcoa or used for waste disposal by the company. Three representatives from DENR investigated the site on November 16, 2007, using ground penetrating radar to search for metal drums. The search did not indicate any burial of waste materials or any disturbance.

Stanly County has also raised concerns about another potential waste site, known as the Chivington Site near Morrow Mountain State Park, in a June 2007 filing with FERC. On November 20, 2007, two members of DWM Inactive Hazardous Site Branch, investigated the alleged dumping site. No evidence of a site was found. Alcoa conducted a follow-up investigation in December 2007 to pinpoint the exact location. An electromagnetic survey was performed to search for metal drums to an approximate depth of 30 feet. The study did not indicate the presence of any metal drums or hazardous waste.

In sum, Alcoa has spent millions of dollars to remediate waste sites in Stanly County and additional efforts are ongoing. The company has also responded to each claim of additional sites and shown that there are no such sites that are not being addressed. Upon approval of the Corrective Measures Study by DWM, Alcoa will begin the final phase of remediation and monitoring designed for long-term protection of human health and the environment. Stanly County has not been - and will not be - asked to bear the cost of this remediation.

In addition, to ensure transparency with remediation efforts, Alcoa has offered for Stanly County to participate in any future sampling or monitoring efforts, offering to split samples in the event Stanly County wants to have them independently analyzed.

C. Arsenic Allegations

Stanly County has made the false assertion that Alcoa is responsible for high levels of arsenic in the land and river adjacent to its plant located in Massena, NY (Grasse River).³⁷ Arsenic is a substance sometimes present in the spent pot linings of an aluminum smelter. At Massena, however, Alcoa's remediation group has concluded that arsenic is not a chemical of concern for remediation of the land adjacent to the Massena location or for the Grasse River.

Similarly, contrary to any claim or implication to the contrary, there is no widespread arsenic contamination at Badin Works due to APGI's smelting operations. Any arsenic associated with Badin Works is contained in an onsite landfill and there simply is no plausible way that arsenic from Badin Works could result in elevated arsenic levels in well water across Stanly County as has been alleged. Moreover, studies show that there is no impact on water in Badin Lake or the groundwater in other parts of the County.

During the RCRA investigation discussed above, Alcoa tested the groundwater on its property for arsenic levels. There was only one place, an onsite landfill, that contained even

³⁷ Stanly County has used a reference to environmental liabilities that the company might incur in Alcoa's 2007 Annual Report as evidence of wrongdoing by Alcoa in this regard. Specifically, Stanly County asserts that mention of "Asset Retirement Obligations" in the Report relates to liability reserves being set up for items such as spent pot lining which Stanly County claims are rich in arsenic.

slightly elevated levels (less than one part per million). Moreover, sampling of the nearby surface waters showed that there is no impact on the water in Badin Lake or in groundwater in the area.

The elevated arsenic levels in the onsite landfill is likely from a combination of naturally occurring arsenic and residual arsenic from spent pot lining buried in the landfill. Arsenic naturally occurs in soil — and can become more prevalent if certain soil conditions are present. In fact, during a joint meeting between APGI and Stanly County, a State Geologist pointed out that Stanly County contains high levels of arsenopyrite (a form of fools gold with arsenic associated with it) which is a natural explanation for the high levels of arsenic, such as those commonly found in the County's soil and groundwater.

Alcoa also tested the water in Badin Lake and Little Mountain Creek for elevated arsenic levels. These are the only outfalls from the Badin Works site that could be affected by the groundwater at the onsite landfill and the arsenic levels were basically undetectable. Alcoa also tested the groundwater at other waste sites for elevated arsenic levels. After conducting extensive testing, only one trace of arsenic was found. One groundwater test at the Alcoa Badin landfill showed arsenic levels of 0.0066 parts per million. This is significantly below the federal standards for safe drinking water set by the Environmental Protection Agency which is at .010 parts per million (10 parts per billion) to protect consumers from the effects of long-term, chronic exposure to arsenic.

D. Alcoa's Power Agreements in Other States

Questions have been raised about the nature of Alcoa's agreements to purchase low-cost hydropower in New York State and Washington State and whether North Carolina should receive similar benefits from Alcoa.

The circumstances in these other states are significantly different, with important and significant distinctions between APGI's hydropower operations in North Carolina and Alcoa's contracts to purchase hydropower in New York State and Washington State.

In New York State and Washington State: Alcoa and/or APGI do not own or operate any hydroelectric facilities in these states. Rather, Alcoa has long-term contracts to purchase low-cost power from publicly-owned hydropower facilities for its aluminum smelters. The hydroelectric facilities in these states were built and paid for by the federal government and local utilities.

In North Carolina: Beginning in 1915, Alcoa and its subsidiaries invested \$80 million to purchase approximately 50,000 acres of land and related floor rights and to build four dams and powerhouses along the Yadkin River in North Carolina. APGI owns the hydroelectric project and owns riparian property rights that allow it to use the water that crosses its property. No government funding or assistance was provided to construct the dams and power house or to purchase the land.

APGI's investment of millions of dollars in land rights, dams and reservoirs represents the crucial distinction between the situations in North Carolina and other states. In North

Carolina, Alcoa and its subsidiaries invested its own money to purchase land that, under North Carolina law, provides the company with riparian water rights. By contrast, In New York and Washington State, Alcoa purchases hydropower from state- or federally-owned power plants and has made no independent investment in hydro facilities in those states.

V. Conclusion

APGI has attempted to address the issues that the ERC was directed to study related to the pending issuance of a new fifty-year license by the FERC to APGI's Yadkin Hydroelectric Project, as well as other issues that have been raised by Stanly County during the relicensing process and discussions of the study bill. If there are questions that remain or if additional clarification is needed with respect to anything included or not included in this brief, please contact APGI's representatives and a subject matter expert will be made available to you.